

## CLAIMS

What is claimed is:

- 1           1.       A system comprising:
  - 2           a home server including a service component, the service component to detect
  - 3           when a server application listens for a connection;
  - 4           a forwarding agent connected to the home server, the forwarding agent to provide
  - 5           an Internet agent with access parameters received from the home server;
  - 6           a remote client coupled through the Internet and to the system by the Internet agent;
  - 7           and
  - 8           wherein, if the remote client provides proper access parameters to the Internet
  - 9           agent, the Internet agent provides the remote client access to a service running on the home
  - 10          server.
- 1           2.       The system of claim 1, wherein, the access parameters include a username
- 2           and a password.
- 1           3.       The system of claim 1, wherein, the service component informs the
- 2           forwarding agent that the server application is listening for a connection and forwards the
- 3           access parameters to the forwarding agent.
- 1           4.       The system of claim 1, further comprising, a gateway running a Network
- 2           Address Translation (NAT) software program, the gateway connecting the forwarding
- 3           agent to the Internet agent via the Internet.

1           5.       The system of claim 4, wherein the forwarding agent establishes an  
2 outgoing connection with the Internet agent through the NAT, to provide a channel for  
3 incoming connection requests.

1           6.       The system of claim 5, wherein the Internet agent and the forwarding agent  
2 become layer 4 routers.

1           7.       The system of claim 1, wherein the service component allows access to the  
2 server application by a remote client by:

3                   a) inquiring whether a user would like the server application to be  
4 accessible from a remote client; and

5                   b) setting required access parameters.

1           8.       A system comprising:

2           a home server including a service component, the service component to detect  
3 when a server application listens for a connection;

4           a remote client coupled through the Internet and to the system by an Internet agent,  
5 the Internet agent listening on behalf of the home server for connection requests from a  
6 remote client;

7           a forwarding agent connected to the home server, wherein the service component  
8 informs the forwarding agent that the server application is listening for a connection and  
9 forwards the access parameters to the forwarding agent, the forwarding agent to provide  
10 the Internet agent with access parameters received from the home server; and

11           a gateway running a Network Address Translation (NAT) software program, the  
12 gateway connecting the forwarding agent to the Internet agent via the Internet;

13 wherein, if the remote client provides proper access parameters to the Internet  
14 agent, the Internet agent provides the remote client access to a service running on the home  
15 server.

1 9. The system of claim 8, wherein the forwarding agent establishes an  
2 outgoing connection with the Internet agent through the NAT, to provide a channel for  
3 incoming connection requests.

1 10. The system of claim 9, wherein the Internet agent and the forwarding agent  
2 become layer 4 routers.

1 11. The system of claim 10, wherein the service component allows access to the  
2 server application by a remote client by:

- 3 a) inquiring whether a user would like the server application to be  
4 accessible from a remote client; and  
5 b) setting required access parameters.

1 12. A method comprising:

2 detecting when a server application listens for a connection from a remote client  
3 on a home server, the remote client coupled through the Internet to the home server by an  
4 Internet agent; and

5 providing the Internet agent with access parameters from the home server;

6 wherein, if the remote client provides proper access parameters to the Internet  
7 agent, the Internet agent provides the remote client access to a service running on the home  
8 server.

1 13. The method of claim 12, wherein, the access parameters include a username  
2 and a password.

1           14.     The method of claim 12, wherein, the home server executes a server  
2 application.

1           15.     The method of claim 12, wherein, a gateway runs a Network Address  
2 Translation (NAT) software program and connects the Internet agent to the home server.

1           16.     The method of claim 15, further comprising establishing an outgoing  
2 connection with the Internet agent through the NAT, to provide a channel for incoming  
3 connection requests.

1           17.     The method of claim 12, further comprising:  
2                   a) inquiring whether a user would like a server application to be  
3 accessible from a remote client; and  
4                   b) setting required access parameters.

1           18.     A machine-readable medium having stored thereon instructions, which  
2 when executed by a machine, causes the machine to perform operations comprising:  
3                   detecting when a server application listens for a connection from a remote client  
4 on a home server, the remote client coupled through the Internet to the home server by an  
5 Internet agent; and  
6                   providing the Internet agent with access parameters from the home server;  
7                   wherein, if the remote client provides proper access parameters to the Internet  
8 agent, the Internet agent provides the remote client access to a service running on the home  
9 server.

1           19.     The machine-readable medium of claim 18, wherein, the access parameters  
2 include a username and a password.

1           20.     The machine-readable medium of claim 18, wherein, a gateway runs a  
2     Network Address Translation (NAT) software program and connects to the Internet agent.

1           21.     The machine-readable medium of claim 20, further comprising establishing  
2     an outgoing connection with the Internet agent through the NAT, to provide a channel for  
3     incoming connection requests.

1           22.     The machine-readable medium of claim 18, further comprising:  
2                   a) inquiring whether a user would like a server application to be  
3                   accessible from a remote client; and  
4                   b) setting required access parameters.

1           23.     An apparatus comprising:  
2             a home server having a processor to perform operations including,  
3             detecting when a server application listens for a connection from a remote client  
4             on a home server, the remote client coupled through the Internet to the home server by an  
5             Internet agent; and  
6             providing the Internet agent with access parameters;  
7             wherein, if the remote client provides proper access parameters to the Internet  
8             agent, the Internet agent provides the remote client access to a service running on the home  
9             server and the home server responds to requests from the remote client.

1           24.     The apparatus of claim 23, wherein, the access parameters include a  
2     username and a password.

1           25.     The apparatus of claim 23, wherein, a gateway runs a Network Address  
2     Translation (NAT) software program and connects the home server to the Internet agent.

1           26.    The apparatus of claim 25, further comprising establishing an outgoing  
2 connection with the Internet agent through the NAT, to provide a channel for incoming  
3 connection requests.

1           27.    The apparatus of claim 23, further comprising:  
2                   a) inquiring whether a user would like a server application to be  
3 accessible from a remote client; and  
4                   b) setting required access parameters.